

**BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554**

IN THE MATTER OF:)	
)	WT Docket No. 05-157
SPECTRUM NEEDS OF EMERGENCY)	
RESPONSE PROVIDERS)	FCC 05-80
)	
Comments for the FCC Mandated by the)	
Intelligence Reform and Terrorism)	
Prevention Act of 2004)	

To: The Commission

The comments of the State of Delaware are offered below in concise summary as well as detailed form.

State Comments – Essential Points

1. The Commission and Congress should expedite the implementation of currently identified spectrum for public safety communications.
2. States and their political sub-divisions that have efficiently utilized spectrum through the use of advanced technologies and/or consolidated communications networks should receive priority in the granting of additional frequencies.
3. Proposed regional communications network consortia employing advanced technologies such as simulcast or multicast trunking should also receive priority in the granting of new and existing spectrum.
4. New technologies in public safety will demand additional spectrum for LMR and other communications applications, such as microwave, and the Commission and/or Congress should continue to identify additional frequencies permitting private sector development of relevant products.
5. Strategies to develop a new nationwide broadband network should not supersede programs designed to add spectrum to currently restrained state and local government communications systems.

Detailed State Comments

These comments are submitted in regard to the above mentioned request of the Commission on behalf of the State of Delaware and its emergency first responders pursuant to Section 7502 of the Act¹. Delaware supports and operates a consolidated digital and analog 800 MHz land mobile radio (LMR) trunked network that provides support and interoperability for the full-time and volunteer first responders in state government as well as every political sub-division of the State. Planning for the State's radio network is performed by Delaware's Department of Technology and Information (DTI). As a national center for corporate business as well as the home of critical infrastructure elements related to chemical manufacturing and other essential industries, Delaware is vitally concerned with strategies that strengthen the communications capabilities of our first responders.

The State of Delaware notes and appreciates the past work of the Commission relative to addressing the spectrum needs of public safety. While the State acknowledges the actions of the Commission to identify future new spectrum for public safety, Delaware believes that additional LMR spectrum for public safety and related governmental and quasi-governmental organizations is required now. Much of the new LMR spectrum identified by the Commission for public safety, such as with 800 MHz rebanding and the 700 MHz frequency band addition, remains in the planning stages and unavailable to first responders until some time in the future. Delaware would urge the Commission identify strategies to expedite the availability of the currently anticipated spectrum in addition to providing supplemental frequencies for public safety.

Delaware is located in the frequency constrained urban northeastern portion of the United States and is currently attempting to expand its LMR network by adding channels to support first responders. With over 10,000 current users in the network, Delaware faces additional constraints as the system grows. As an example, in New Castle County, Delaware's most populous county, no 800 MHz frequencies can be identified to implement low-powered vehicular repeater systems that will extend the statewide network into structures that are resistant to base station transmitter signals. The extension of the LMR radio network to overcome the challenges of "in-building" coverage has been deemed the number one communications priority of the State's first responders. Accordingly, Governor Ruth A. Minner has targeted programs to enhance "in-building" radio coverage as a top priority for state government and to that end, has supported an interim expansion of the statewide 800 MHz radio network at a cost exceeding \$51,200,000.

In 2004, Governor Minner and the State adopted a strategic plan for developing a future or "Next Generation" state-of-the-art radio system that would serve every first responder in Delaware as well as our federal and quasi-governmental partners, such as volunteer emergency services organizations, in the war on terrorism. The State's Strategic Plan is built upon many of the precepts contained in the SAFECOM report of the United States Department of Homeland Security². The Strategic Plan is predicated upon the availability of new LMR spectrum in both the 700 and 800 MHz bands. This Plan anticipates the dramatic expansion of LMR technology incorporating strategies to enhance communications between the scene of a terrorist or other

¹ Intelligence Reform and Terrorism Prevention Act of 2004, Pub. L. 108-458, 118 Stat. 3638 (2004) (Intelligence Reform Act).

² Statement of Requirements for Public Safety Wireless Communications and Interoperability, Version 1.0 published by the SAFECOM Program of the Department of Homeland Security, March 10, 2004.

emergency incident as well as multiple “on-scene” communications networks as envisioned in the SAFECOM Report.

There is universal agreement that the United States enjoys the finest military force in the world. To support the individual heroic contributions of the men and women of our military forces, the United States has invested billions of dollars to employ technology in the battlefield. This strategic technological advantage has required a tremendous amount of spectrum to provide support for our armed forces. Just like the military, state and local governments will require additional LMR and other spectrum resources to implement dramatic new technologies that assist in the war on terrorism as well as in response to the emergencies that often confront first responders.

The State would encourage the Commission to recognize the frequency constraints of the well populated areas of the United States such as the Mid-Atlantic and northeast regions. In these areas, priority in the expansion of spectrum resources could be afforded to the political jurisdictions that have maximized the efficiency of allocated frequency channels. Using Delaware as an example, every first responder in the State is supported through a relatively small number of 800 MHz frequency pairs. In other states, each city, town, and county, as well as state government, would be requesting many, and potentially uncoordinated, frequency pairs. This communications network consolidation model has worked well for the people of Delaware and we believe that the Commission should prioritize the assignment of additional spectrum to the jurisdictions participating in regional public safety communications strategies that maximize the efficiency of LMR systems through multi-user trunked radio systems.

As broadband services become more prevalent in public safety networks, additional spectrum will also be required to expand microwave and other relay networks permitting higher data capacities. Many public safety organizations rely upon high-reliability microwave networks for the coordination of trunked radio systems. As new technologies for the recently approved 4.9 GHz band become available, the relay of bandwidth intensive transmissions will require additional spectrum to prevent delays in distant transmissions. Like constraints with LMR spectrum, the expansion of microwave systems can represent substantial challenges for public safety systems. Because these networks must provide universal connectivity throughout a jurisdiction, microwave often becomes the only viable alternative for high capacity bandwidth as commercial resources cannot always be deployed economically in sparsely populated areas.

With respect to Section 7502 (c) of the Act, Delaware believes that there is potential value in a nationwide broadband network. However, the developmental challenges to such a national network will be substantial and years will be required to implement a network. This amount of time increases communications vulnerability in meeting today’s needs for enhanced public safety communications. Delaware believes that if such a network is authorized by the Congress, the planning and development of such a resource should not supersede the immediate spectrum needs of first responders in expanding today’s existing networks.

The State also acknowledges the important role of commercial providers in supporting public safety communications networks. Delaware utilizes many commercial communications towers in its network and the Strategic Plan described earlier in these comments supports the continued use of commercial resources. However, with respect to the deployment of LMR and microwave networks, the State recognizes the need to provide appropriate levels of network coverage throughout every political sub-division, regardless of its population or economic strata.

Conversely, commercial carriers typically expand networks when such expansion is consistent with its business plans and strategies for achieving appropriate returns on investment. This type of action is perfectly appropriate for a publicly owned company that must also be concerned with increasing shareholder value. However, governmental service is different and the State of Delaware must be concerned with ensuring network coverage in every part of the State.

In response to Section 7502 (d) of the Act, the State of Delaware encourages Congress and the Commission to provide an additional allocation of spectrum in the 700 MHz band for emergency response provider communications. The State believes that the need for additional spectrum is immediate and strategies to expedite the allocation of first responder spectrum would help all first responders to support our country's war on terrorism as well as more fully responding to the emergency needs of our citizens.

Finally, the State would emphasize to the Commission as well as the Congress, that it is critical for new spectrum to be made available to the states and their political sub-divisions now. This demands immediate action on the part of our government to both implement and make immediately available currently identified spectrum as well new frequencies to meet the future challenges of terrorism and similar threats to the safety and security of the United States and its citizens. The federal government cannot proactively rise to every threat and the states must be empowered through the establishment of communications infrastructure, as well as other preventative federal programs, to augment our government in the war on terrorism.

The State of Delaware appreciates the opportunity afforded by the Act to offer these comments.

Sincerely,

Thomas M. Jarrett

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